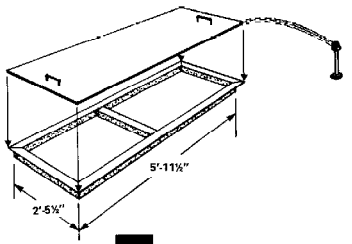
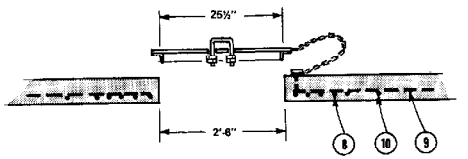
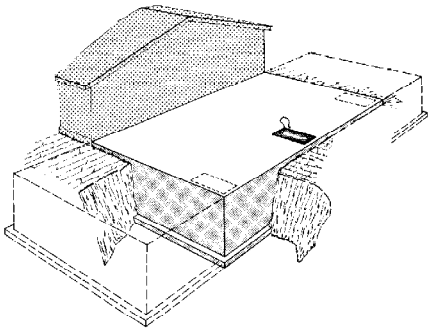


6





1 length in multiples of 12'-0"; maximum length is controlled by (12), for larger tank use 2 or more access ports (6)

2 may be 12,14,or 16' span

3 2 slab spans of 12'-0",24'-0" total or 2 slab spans of 14'-0",28.-0" total

4 3 slab spans of 12'-0",total 36'-0" or 3 slab spans of 14'-0",total 42'-0"

5 tank depth may be 8'-0" or 10'-0"

6 2'-6" x 6'-0" access port;cover plate ¼" checkered steel with 2" x 2" x ¼" steel angle frame (45 lb. min. total); safety chain welded to cover and bolted to tank; all steel rust-proof painted; see also detail 6

7 3 - No.5 x 6'-8" rebars @ 3" oc, 2" from bottom of slab, extend 24" beyond opening as shown

8 4 - No.5 x 8'-0" rebars @ 3" oc, 1½" from bottom of slab, locate as shown, in addition to (10)

9 No.5 rebars, continuous @ 1'-8" oc

10 No.5 rebars, continuous, spaced at
18" oc for spans of 12'-0"
13" oc for spans of 14'-0"
10" oc for spans of 16'-0"
concrete cover of 2" below the rebars

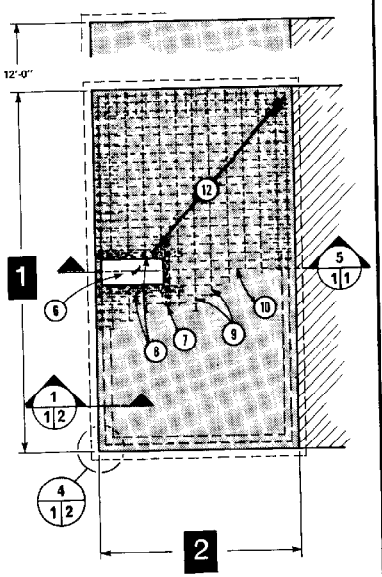
11 6'-0" x 6'-0" x 1'-0" deep sump under each access port (6)

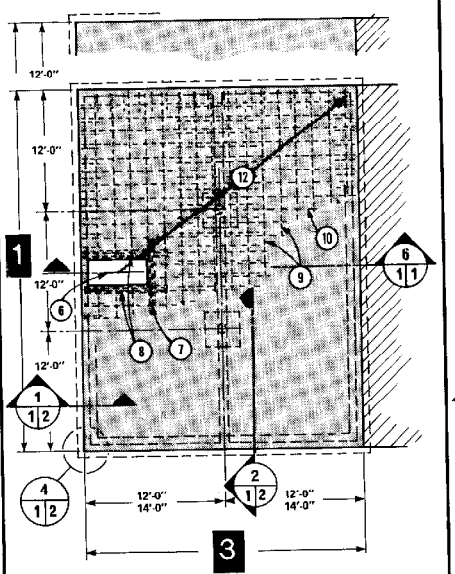
12 tank dimensions 1, 2, 3, and 4 depend on maximum agitation radius of pump used; typical tractor-powered pumps agitate 25'to 30' (see manufacturer)

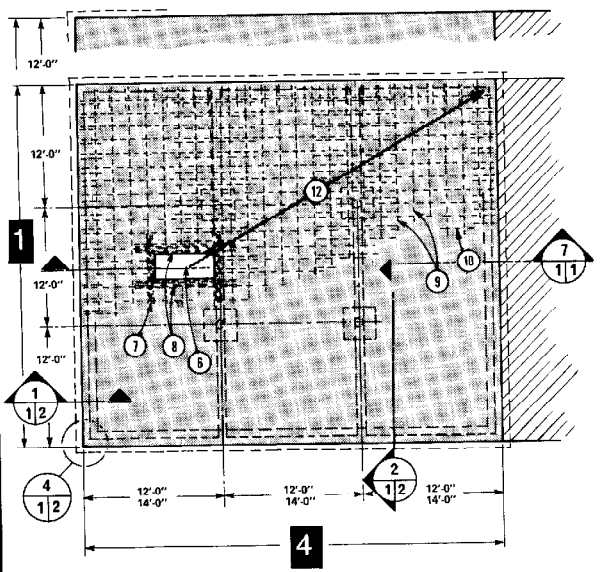
13 reinforcing steel to be deformed bars, 60 000 psi grade; concrete to be 4000 psi @ 28 days, 6% air entrained

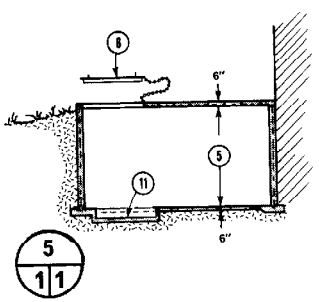
14 tank covers designed for 73 psf dead load and 100 psf live load, based on typical snow loads and animal traffic, NOT WHEEL LOADS SUCH AS MANURE TANKERS OR LOADED TRUCKS

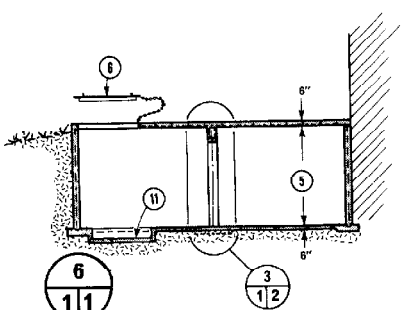
15 tank walls designed for soil water-saturated to full wall height; DO NOT DRIVE LOADED MANURE TANKERS OR TRUCKS CLOSE TO THE TANK WHEN SOIL IS WET

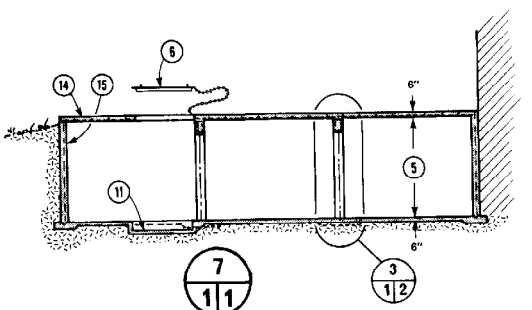












WARNING
This plan may require structural and other changes to meet local site conditions, climatic loads, user requirements and applicable building regulations (such as the Canadian Farm Building Code). Before construction, the user of this plan is responsible to ensure that all required changes are made.

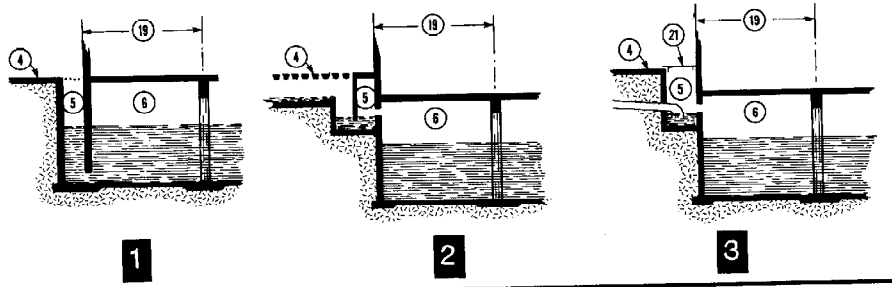
SYM	REVISIONS	CHECKED	DATE	APPROV
	revised & re-issued	DJM	83-08	JET

CANADA PLAN SERVICE

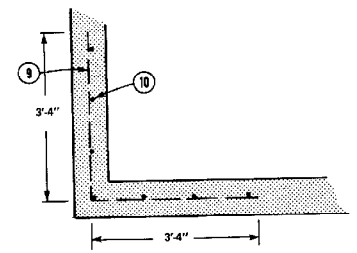
CONCRETE COVERED RECTANGULAR MANURE TANK

(not to scale)

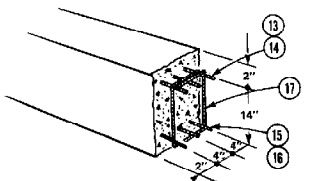
DESIGNED DJM	DATE 83-01	PLAN 10712
DRAWN Blair/Morden	REVISED 83-08	
TRACED	DETAIL NUMBER A ORIGINATES ON SHEET B DRAWN ON SHEET C	SHEET 1 OF
CHECKED JET		



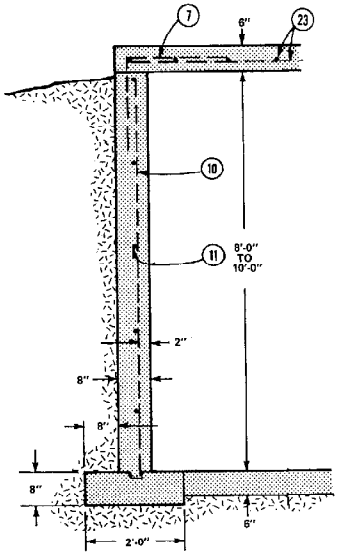
1 2 3



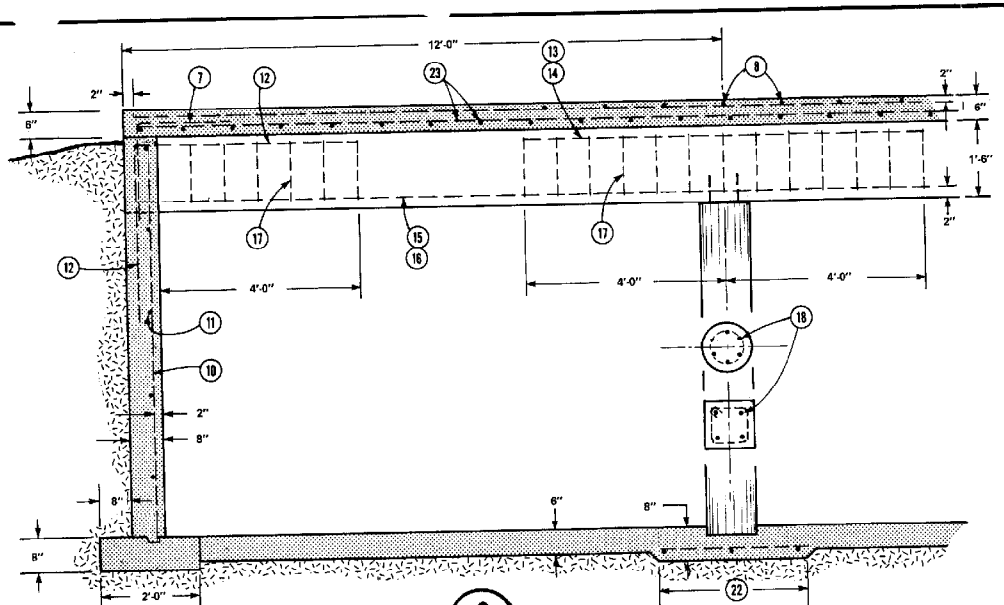
4 1/2



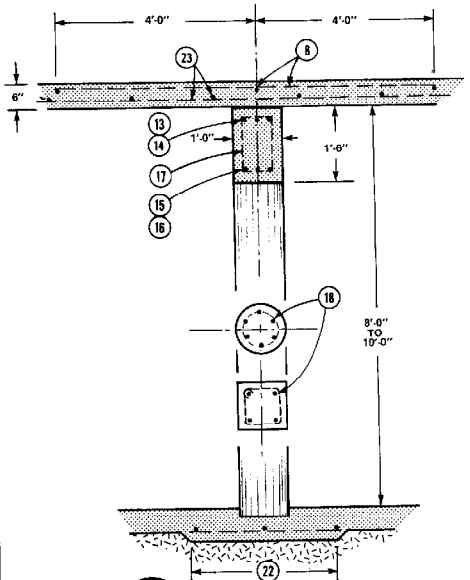
20



1 1/2



2 1/2



3 1/2

1 gas trap for scrape-alley system

2 gas trap for continuous-flow system

3 gas trap for gravity-flush system

4 floor level of building

5 gas trap box,

6 manure tank

7 No.5 x 6'-0" L shaped rebars;
for 12'-0" span slab space at 18" oc
for 14'-0" span slab space at 14" oc
for 16'-0" span slab space at 12" oc

8 No.5 x 8'-0" rebars over beams;
for 12'-0" span slab space at 14" oc
for 14'-0" span slab space at 10" oc
held in place with 3 - No. rebars across

9 No.5 x 6'-8" horizontal L-shaped rebars at corners @ 20" oc

10 No.5 vertical rebars;
space at 20" oc for 8' high walls
space at 12" oc for 10' high walls

11 No.5 horizontal temperature rebars spaced @ 20 " for 8' and 10' wall height

12 No.5 x 8'-0" L rebars, 3 bars at each end of each beam

13 2 - No.5 x 8'-0" rebars, centered over column for slab span 19 = 12'

14 3 - No.5 x 8'-0" rebars, centered over column slab span 19 = 14'

15 2 - No.5 rebars, continuous for 12' slab spans

16 3 - No.5 rebars, continuous for 14' slab spans

17 No.3 stirrups @ 8"

18 12" dia. columns @ 12'-0" oc, with No.3 spiral @ 3" oc and 6-No.3 vertical rebars extended 6" into beam above; or column may be made 12" square and reinforced with 4 - No.4 vertical rebars form pocket 1½" deep into floor slab to locate bottom of column

19 slab span 12'-0" or 14'-0"

20 typical stirrup and longitudinal reinforcement in beam

21 air tight cover plate

22

soil safe bearing pressure psf	square footing width (22)	rebars each way
2000	4'-8"	4-No.5
3000	3'-8"	3-No.5
4000	3'-4"	3-No.5

23 see sheet 1, notes (9) & (10)

SYM	REVISIONS	CHECKED	DATE	APPROVED
	revised & re-issued	D.I.M.	83-08	

CANADA PLAN SERVICE

STRUCTURAL DETAILS

(not to scale)

DESIGNED D.I.M.	DATE 83-01	PLAN 10712
DRAWN Blais/Morden	REVISED 83-08	
TRACED	DETAIL NUMBER... ORIGINATES ON SHEET... DRAWN ON SHEET...	SHEET 2 OF 2
CHECKED J.E.T.		